

Iowa Department of Natural Resources
Wastewater Section
Construction Permit Application
SCHEDULE K3, Anaerobic Lagoon

DATE PREPARED	PROJECT IDENTITY		DNR USE	
			PROJECT NO.	
DATE REVISED			PERMIT NO.	

1. <u>Design Basis:</u>	AWW	MWW	PHWW
Flow, MGD	_____	_____	_____
BOD ₅ , #/day	_____	_____	_____
TSS, #/day	_____	_____	_____
Kjeldahl Nitrogen, #/day	_____	_____	_____
Sulfate, mg/l	_____	_____	_____
Design temperature, _____ °F	_____	_____	_____

2. No. of soil borings taken _____ Data included in the _____
High groundwater elevation (MSL) _____

3. Top of dike elevation (MSL) _____ ft 100 year flood elevation (MSL) _____ ft

4. <u>Lagoon Data</u>	<u>Cell No. 1</u>	<u>Cell No. 2</u>	<u>Total</u>
Surface area @ maximum depth (A)	_____	_____	_____
Loading (#BOD ₅ /1000 cu ft)	_____	_____	_____
Retention time (days)	_____	_____	_____
Effective volume (MG)	_____	_____	_____
Depth (ft)	_____	_____	_____
Surface width (ft)	_____	_____	_____
Surface length (ft)	_____	_____	_____
Freeboard @ maximum depth (ft)	_____	_____	_____
Top width of dike (ft)	_____	_____	_____
Inner Embankment Slope H/V	_____	_____	_____
Outer Embankment Slope H/V	_____	_____	_____

5. Method of raw flow diversion to cells _____
Are the locations of piping and structures given on Schedule H1? Yes ☐ No ☐

6. Series or parallel operation? _____

7. Method of interconnecting cells _____

8. Describe inlet piping and location _____

9. Describe outlet piping and location _____

10. Method of sampling _____

11. Type of flow measurement _____ Location _____

12. Method of establishing and maintaining a scum cover _____

13. Method of removing accumulated sludge _____

14. Fence Height _____ No. strands barbed wire: Top _____ Bottom _____

15. Number of warning signs _____ Location _____

16. Maximum allowable leakage rate _____ in/day
Method of testing leakage rate _____

17. Are specifications included for:

a. Seeding	Yes <input type="checkbox"/>	No <input type="checkbox"/>
b. Soil sterilization	Yes <input type="checkbox"/>	No <input type="checkbox"/>
c. Pond bottom uniformity	Yes <input type="checkbox"/>	No <input type="checkbox"/>
d. Pond sealing	Yes <input type="checkbox"/>	No <input type="checkbox"/>
e. Erosion protection	Yes <input type="checkbox"/>	No <input type="checkbox"/>

18. Is service bypass provided? _____ Discharge to _____